Technical Information

Honeywell

MC Toolkit Rugged & Intrinsically Safe models
Model MCT202
Specification

34-ST-03-80 October 2010

Features

– Configures any Honeywell DE device: ST3000 pressure and STT3000 temperature transmitters.

– Configures any HART® device with a published HART Device Descriptions (DD), regardless of device manufacturer.

– Supports easy downloading of any new vendor's DD files via a PC connection.

– Intuitive graphical user interface provides simple navigation and device configuration.

– Available in three versions handling almost any environmental condition: Figure 1

- Ruggedized version- Environmentally hardened with no approvals.
- Zone 2 approvals: Intrinsically-safe version available with FM Class I, Div 2 and ATEX Zone 2 approvals.
- Zone 1 approvals: Intrinsically-safe version available with FM Class I, Div 1 and ATEX Zone 1 approvals.

– Fully supports all HART 5.X, HART6.X and wired HART7.X. Commands and utilizes DD-IDE/SDC 625 technology and "Open" Tools standard.

Benefits

– Supports transmitter diagnostic and on-line monitoring as well as transmitter calibration.

– Standardizes both HART and DE field instrument configuration with one hand-held device. Configuration of common, universal and specific device commands is supported.

– User interface provides detailed explanations and sub-menus during the configuration process for ease of operation for even the casual user.

Ruggedized

Zone 2

Zone 1

Figure 1- MCT202 Selectable versions
Ruggedized, Zone 2 and Zone 1 Intrinsically safe

Benefits (continued)

- Supports communication with HART devices when the operator is performing the following functions:
  - Initial device configuration
  - Starting a method
  - Changing a configuration parameter
  - Determining the actual “state” or process variable of a particular device
  - Activating a device’s internal diagnostic functions.
- Avoid obsolescence issues when vendors publish new DD files
  - Download new device descriptions from the HART website.
  - Acquire the latest DD releases from the manufacture’s website including device descriptions not available from HART.
  - Honeywell FDC2.0 Application comes with built in DD manager which allows easy addition and deletion of DDs. FDC2.0 also supports IEC 61804-3 EDDL Standards.
  - Honeywell FDC2.0 Application has the facility to create custom views for easier and quicker access to device information.
  - Improved DD selection mechanism enables the following configuration options when the proper DD is missing
  - Use Generic DD ;Use previous version of DD or Always prompt the user
- Incorporates data reasonability checks. Under given conditions, the MC Toolkit configurator will not accept configurations beyond device ranges reducing the likelihood of costly mistakes.
- FDC2.0 application in the MCT 101/202 toolkit release 4.0 allows the user to capture one snapshot of the connected device’s configuration history. This history can be imported in to the FDM database. Available with FDM Release 301.1.1 and later.

Benefits:

- Comprehensive Device database of all the on line and offline devices with FDM.
- Ability to Schedule Device calibration.
- FDC2.0 Application allows the user to import the device configuration parameters from FDM (Field Device Manager)

Description

The Honeywell MC Toolkit Configurator is a Pocket PC-based engineering and maintenance tool used to configure, monitor, diagnose and manage smart field instruments/devices. Designed specifically for ease-of-use and increased productivity, this multipurpose tool supports both HART and Honeywell’s Digitally Enhanced (DE) communication protocols. The MC Toolkit allows easy access to instrument configuration database parameters without the need for prior training, user manuals or previous experience. Each MC Toolkit comes loaded with all registered HART Device Description (DD) files and may be supplemented with non-published DD files at any time – so any HART new device can be configured as long as a DD can be downloaded. New DD files are easily downloaded and installed using ActiveSync software and the USB cable provided.

The MC Toolkit Configurator is loaded with two software applications:

1. The MC Toolkit software configures Honeywell DE devices
2. The FDC2.0 software configures non-Honeywell HART devices

The combination of these two applications enables true “Universal” configuration of HART devices and Honeywell DE devices.

The MCT202 is rated intrinsically safe for Zones 1& 2 for both FM C and ATEX.

Specification

MCT-202	
Pocket PC	i.roc 6XX (HP iPAQ hx2490 or equivalent)
Processor	Intel PXA270 520 MHz
Memory	128 MB ROM and 64 MB SDRAM 1 GB San Disk Flash Memory card
Operating System	Microsoft Windows Mobile 5.0
Display	3.5” Transflective TFT color with LED backlight 240 x 320 pixels, 64K color, touch screen
Power Supply	Rechargeable Lithium-Ion battery plus new charger options All AC power options accept voltage inputs (Vac) of 90 - 264. Select the version required based on the input connection types available. Select using the pictures below. **US Type** **EU Type** **AU Type** **UK Type**
Dimensions	(6 x 2.875 x 1.5 in) (15.24 x 7.3025 x 3.81 cm)
Weight	200 g (.4409 lbs)
Operating Temperature	-10 to +50°C (+14 to +122°F)
Storage Temperature	-20 to +60°C (-4 to +140°F)
Operating Humidity	10 to 90% RH
Memory Requirements	Approximately 51MB (includes all HART registered device descriptions). MC Toolkit software, including FDC2.0 and HART DD files, are loaded on flash memory card. The flash memory card in the MCT202 is not removable.
HART Device Description	Each MC Toolkit is loaded with a complete set of HART DD files available at the time of manufacture. If the device vendor has qualified their DD with the HART Foundation, the device description is assured of being compliant with the HON FDC2.0 Application. Additional DDs can be downloaded as new releases or new products become available through the ActiveSync connection.
Approvals	European EMC Standards: EEC Directive 89/336 (EMC) CE Mark FM C-US: Intrinsically Safe – Class I, Div 1 Group A,B,C,D Non-incendive – Class I, Div 2 Group A,B,C,D ATEX: Intrinsically Safe – Ex II 2G EEx ia IIC T4 Type n – Ex II 3G EEx nL IIC T4 Dust ignition proof – Ex II 2D T99oC IP65; Ex II 3D T55oC IP65

MCT202 Parts

i.roc 6XX (HP iPAQ Pocket PC)
Integrated HART/DE modem
6’ transmitter connector cable with one set of alligator clips and one set of EZ Clip connectors
CD ROM (MC Toolkit + FDC2.0 software)
MC Toolkit user manual
i.roc user manual
i.roc charger LG x 10
2 stylus pens
1 battery installed
1 GB SD card installed

MCT202 Parts

Item Number	Description	MCT202
50036088	MC Toolkit Upgrade Kit: San Disk card loaded with MC Toolkit and FDC2.0 software plus HART DD files	
50018046-001	Transmitter connector cable with one set of Alligator clips and one set of EZ clips	Available
50017823-001	Stylus pens, set of two (2)	Available
50017828-001	Spare charger LG x 10 (US adaptor)	Available
50017828-002	Spare charger LG x 10 (EU adaptor)	Available
50017828-003	Spare charger LG x 10 (UK adaptor)	Available
50017828-004	Spare charger LG x 10 (AU adaptor)	Available
50017822-001	Leather carrying case	Available
50017824-001	Hand Strap	Available
50018626-001	Docking station with charger adapter and USB cable for computer interface	Available
50017827-001	Docking station with USB cable	Available
50017825-001	Charger adapter for docking station	Available
50018045-001	USB interface kit with charger cable	Available
51453286-501	Honeywell CD-ROM software (FDC2.0 and MC Toolkit software)	Available

Model Selection Guides are subject to change and are inserted into the specifications as guidance only.
Prior to specifying or ordering a model check for the latest revision Model Selection Guides which are published at:
http://hpsweb.honeywell.com/Cultures/en-US/Products/Instrumentation/ProductModelSelectionGuides/default.htm

Model Selection Guide

Honeywell

MC Toolkit (Rugged and I.S.) Model Selection Guide
Multiple Communication Configurator

Model Selection Guide
34-ST-16-61 Issue 8

Honeywell Proprietary

Ruggedized Zone 2 Zone 1

Instructions

- Select the key number. Make one selection from each Table.
- A dot (•) denotes unrestricted availability.

Key Number		I		II		III
_ _ _ _ _ _	-	_ _	-	_ _	-	_ _

KEY NUMBER

Description	Selection	Avail.
MC Toolkit Configurator	MCT202	↓
This MC Toolkit version comes complete with 2 stylus pens, LGx10 charger, integrated HART/DE modem, USB interface kit w/ charger cable, 4' transmitter connector cable & clips and manuals on a CD-rom.		

TABLE I - Safety Approvals

Location Type	Approval Body	Approval Type	Location or Classification	Selection	Avail.
None	No approval body certifications included			ZZ	•
Zone 1 Div 1	FM C-US	Intrinsically Safe	Class I, Div. 1, Groups A,B,C,D AEx ia IIC Zone 1	XF	•
	ATEX	Intrinsically Safe Dust Ignition Proof	Ex II 2G EEx ia IIC T4 Ex II 2D T99°C IP65; Ex II 3D T55°C IP65	XA	•
Zone 2 Div 2	FM C-US	Non-Incendive	Class I, Div. 2, Groups A,B,C,D AEx nA [L] IIC Zone 2	YF	•
	ATEX	Type n	Ex II 3G EEx nL IIC T4	YA	•

TABLE II - AC Power Options

All AC power options accept voltage inputs (Vac) of 90 - 264.

Universal Type

Universal Connector Type	00	•

TABLE III - Options

No Options	00	•
Hard copy of User's Manual	UM	•

Ordering Example: MCT202-YF-00-UM

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Model Selection Guide Continued

Honeywell Proprietary

Accessories & Spare Parts

Accessories/Spare Parts	Part Number
CD-ROM (FDC 2.0 software + MC Toolkit software)	51453286-501
Leather carrying case	50017822-001
Spare charger LG x 10 (Universal adaptor)	50025670-001
Stylus pens, set of two (2)	50017823-001
Docking station, adapter and USB cable for computer interface	50017826-001
Docking station with USB cable	50017827-001
Adapter for docking station	50017825-001
USB interface kit with charger cable	50018045-001
Transmitter connector cable	50018046-001
Hand strap	50017824-001
MCToolkit replacement kit (Applicable for MCT101 only)	50020492-501

For More Information

Learn more about how Honeywell's MC Toolkit Configurator Tools can be used to configure, monitor, diagnose and manage smart field instruments/devices, visit our website www.honeywell.com/ps/hfs or contact your Honeywell account manager.

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